Charting Bertha's course to Seattle

The starting line

Bertha's trip underground will start in an 80-foot-deep pit to the west of CenturyLink Field, but her journey to Seattle starts in Osaka, Japan, where she was manufactured by Hitachi Zosen Corporation. Fully assembled, Bertha is bigger than most boats. To fit her on a single ship, crews had to take her apart into 41 pieces, the largest weighing nearly 900 tons.

All aboard

Bertha's trip to Seattle starts with a single ship, the Jumbo Fairpartner. As its name suggests, this boat is big – 475 feet long and 90 feet wide. It's about the same size as the largest Washington State Ferry. Both boats even travel at about the same speed. One key difference – the Fairpartner weighs more than 13,000 tons, nearly three times as much as a ferry boat. It's equipped with two 900-ton cranes to lift Bertha on and off the deck of the ship. Bertha's 5,000-mile trip across the Pacific Ocean takes about two weeks, depending on weather. Things to see along the way: birds, water and the occasional land mass. Let's just say Bertha will have plenty of time to tweet.

Berthing Bertha

This is the fun part, Bertha's grand arrival in Seattle. A map showing different viewing locations around the city is on the other side of this brochure. Crews offloading the machine must work around regular Port activities, so there could be periods of time when there isn't much to see. Check our webcam at www.alaskanwayviaduct.org and look for updates from Bertha on Twitter to find out when interesting pieces will be offloaded.

Slow and steady across the dock

Bertha's pieces will be arranged strategically on the Fairpartner, so that crews unloading the ship in Seattle can quickly move them to their predetermined storage locations within the work zone. How do you move a 900-ton piece of tunneling equipment? It's not easy. First, get yourself a truck with 96 axles and nearly 800 tires. And be sure to take it slow. Each of Bertha's pieces will be lowered from the ship to one of these specialized trucks, which will move at a snail's pace toward the launch pit. The pieces will sit in the work zone until it's time to be lowered into the pit for assembly.

Into the pit

A massive red crane will lower Bertha's pieces into the launch pit. Reassembling and testing the machine will take about two months. Crews from Hitachi Zosen will assist throughout the process. In fact, Bertha won't officially become the property of Seattle Tunnel Partners until she's successfully tunneled approximately 1,000 feet beneath Seattle. Bertha is scheduled to start digging this summer.